

## **REMARKS**

The Office Action mailed on November 20, 2003, and comments therein have been carefully considered.

### I. In the Drawings

The Examiner has accepted the drawings filed on September 27, 2001, subject to correction of informalities regarding color drawings and half-tone quality as indicated on the Notice of Draftsperson's Patent Drawing Review dated November 19, 2001. Applicants have substituted black and white drawings and improved the quality of Figures 1-21. Applicants are submitting herewith Figures 1-21 as indicated above. No new matter is added. Reconsideration is respectfully requested.

### II. In the Specification

The Examiner has objected to the Abstract pursuant to 37 C.F.R. § 1.72(b) because of the length. Applicants have amended the abstract to comprise a brief narrative of the disclosure of 150 words or less. Accordingly, reconsideration is respectfully requested.

### III. In the Claims

Claims 1-21 are currently pending and all claims have been rejected. Applicants have amended claims 1, 2, 4-8, 10, 15, 16, 18 and 21, added claim 22, and canceled claims 11-14, 17, 19 and 20. Support for the amendments in claims 1 and 2, and new claim 22 is found in paragraphs 43, 52 and 53 of the specification as published on February 6, 2003. Claims 11-14 and 17 were combined with claim 10. Claims 19 and 20 were combined with claim 18. The remaining claims were amended for consistency. Reconsideration is respectfully requested.

IV. Claim Rejections

A. *Section 112, second paragraph*

The Examiner has rejected claims 1-21 pursuant to 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, on grounds that, as per claims 1 and 2, the term "said managed information" lacks an antecedent basis, and the term "textual digital forms" does not tie up to the description provided in the preamble. Applicants have amended claims 1 and 2 to provide a proper antecedent basis. Accordingly, reconsideration is respectfully requested.

B. *Section 102(e)*

The Examiner has rejected claims 1-5 pursuant to 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,314,426 issued to Martin *et al.* ("Martin") on grounds that Martin discloses a system as set forth in the claims. Applicants respectfully traverse the rejection because Martin only discloses an informational retrieval and output system. Martin does not disclose a system that furnishes real-time interactive knowledge management of activities conducted simultaneously by multiple users like a central repository of information where individuals come to convey and exchange knowledge as claimed in the present application.

To anticipate a claim pursuant to 35 U.S.C. § 102, the "reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter."<sup>1</sup> See PPG Industries v. Guardian Industries Corp., 75 F.3d 1558, 1566 (Fed.Cir. 1996).

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<sup>1</sup> Anticipation requires that every element and limitation of the claimed invention be found in a single prior art reference, arranged as in the claim. Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 58 U.S.P.Q.2d 1286 (Fed. Cir. 2001). Thus, "anticipation requires that the four corners of a single, prior art document describe every

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*See also Motorola v. Interdigital Technology Corp.*, 121 F.3d 1461, 1471, 43 USPQ.2d 1481, 1489 (Fed.Cir. 1997). Because Martin's information retrieval and display system fails to disclose each and every element of the real-time interactive knowledge management system claimed in claims 1-5, let alone enable one skilled in the art to make the claimed system, Martin simply cannot anticipate the present invention.

The present invention claims a unique system for managing information. It utilizes data with alternative combinable multimedia forms to provide real-time interactive knowledge management. This is provided in support of activities conducted simultaneously by multiple users in different remote locations and comprises receiving, accessing, processing, searching, storing, retrieving, transmitting and utilizing data to provide knowledge management over a distributed network of computers. A library science means is used for categorizing the data by creating classification profiles of data elements that describe and classify the element. A linguistics means is used for defining information acquisition, exchange and workflow to permit categorization. Based upon library science and linguistics means categorization a database means is used for storing the data elements according to a schema which implements the categorization. A media production means is used for representing data elements in multimedia audible, visual and textual digital forms; and computer software means implements the system over a computer network to permit interactive, multidirectional, multimedia digital data communications originated by a user from at least one first location and made available to at least one second location.

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element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation." *See Advanced Display Systems Inc. v. Kent State*

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By contrast, Martin discloses an output system/apparatus for retrieving and outputting information from storage. The output system comprises a storage means for storing information to output to a user, output means for outputting information retrieved from the storage means and input means for generating a control signal. An essential purpose of Martin is to provide an improved technique for selecting and browsing information. For example, "in one aspect, the invention may simplify and speed up the selection and browsing of information by reducing the number of actions and/or the number of muscle movements that need to be performed by the user...." (Column 2, lines 1-5). Martin's point and click output system does not disclose a system for real-time interactive knowledge management of activities conducted simultaneously by multiple users as claimed in claims 1 or 2. Not only are the system and the purpose of Martin's system different but the entire underlying concepts used in Martin differ from those in the present application, most notably the organization and presentation.

Martin's system employs a tree structure wherein units of information are defined as parents and children (Column 7, lines 33-41; Claim 14). The information is linked. That is Martin's organizational structure arranges information "in units with links defined between the units (for example to define sibling and parent units). The embodiments may be used in systems in which each unit of information has a plurality of sibling units, but only one parent unit or in systems in which information units have a plurality of parent units as well as sibling units. The level of detail of information within a sibling unit may be greater or less than the level of detail in its parent unit..." (Column 18, 51-58). Martin does not disclose organization of data according to set theory using library science and linguistics means in which data is robustly

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classified and organized in an overall schema for dynamic retrieval according to common characteristics as claimed by Applicants in this application. Martin does not disclose a classification profile containing fields providing information describing and classifying the knowledge elements of the data as with Applicants' invention. Thus Martin also cannot possibly disclose a database schema means for storing elements as in claims 1 or 2, for providing multiple levels of restricted access to information as in claim 3, or for implementing and retrieving from subcategories as in claims 4 and 5.

Using classification profiles, not parent-child linked information or a card catalogue-type of technique shown in Martin, Applicants discovered a unique way of organizing data. A library science means categorizes the data by creating a classification profile for at least one element of the data. That profile contains fields of information describing and classifying the element so that elements of data sharing a common characteristic are retrievable from different categories or subcategories. The system utilizes linguistics means for defining information acquisition, exchange and workflow to permit the categorization.

The Examiner has cited Column 6, lines 7-26, and Column 18, lines 26-31 in Martin as disclosing a library science and linguistics means. But Martin really only refers to "following each category name, the title of each of the articles within that category and, following each title, an extract from the article, preferably the first sentence, the first few lines of the article or a summary." Titles and sentences are not "linguistics." Linguistics is the study of language. In the present case, the written and sometimes spoken word. Language is rules for combining written symbols, such as words to communicate thoughts and feelings. The term "linguistic" is defined to mean "Of or pertaining to language; relating to linguistics, or to the affinities of

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languages." The term "language" is defined to mean "Communication of thoughts and feelings through a system of arbitrary signals, such as voice sounds, gestures, or written symbols. Such a system including its rules for combining its components, such as words." Webster's Revised Unabridged Dictionary, (c) 1996, 1998 MICRA, Inc.

The key is "words." The claimed system analyzes every word in the data and relates it to other words nearby to categorize by "content." It does not require human intelligence and summary content at all. Martin relies on the human brain to read the title and short abstract and then determine the usefulness. The claimed system uses linguistic theory to analyze every word and it makes the classification judgment. Martin requires a title and an abstract plus a human brain to form a "category." The claimed system analyzes every word utilizing categorization rules to form a category or classification profile for a data element.

Furthermore, data in the claimed system is retrievable independent of the information in any other category or subcategory. The database schema is structured to allow a single item of managed information to be stored in at least two different locations. (Published Application, Para. 17). Information may also be altered and stored twice in the database in two different categories or subcategories even though it represents the same item. (*Id.* Para. 48). The schema is flexible and can be designed for a different application or use, and require a different database schema "library" structure which is dictated by the business processes and practices that are undertaken by the client in gathering and using the information contained in the system. (*Id.* Para. 44). An example of schema or organization is shown in Figure 5. This is not shown in Martin.

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Moreover, Martin's presentation of information is different from that claimed in the present invention. Martin discloses a menu presentation with scrolling. The available types of information are listed in a conventional manner and displayed on the screen of a TV and coincide with the tree structure of organization. The user scrolls through the menu by moving a joystick. (Column 10, lines 13-20). Listed categories become highlighted on the display, and the user selects a chosen category by moving the joystick. Martin does not disclose a searching protocol, or features for searching each category or subcategory for a designated item of managed information as claimed by Applicants.

The claimed system enables users to access and retrieve elements of data that have been categorized as described above. The categorized elements have classification profiles which describe and further characterize the elements. Thus the system's capabilities for accessing and retrieving the elements are inherently unique and not comparable to retrieving documents itemized according to a tree structure by title or subject using a scroll down menu. In particular, the claimed system enables users to conduct searches by a match of data, identification information, classification information for that item, boolean, for example, based upon classification profile. For at least these reasons that Martin fails to disclose each and every element of each of claims 1-5, Martin cannot provide an anticipating reference.

*C. Section 103(a)*

The Examiner has rejected claims 6-21 pursuant to 35 U.S.C. § 103(a) as being unpatentable over Martin on grounds that features of the invention not explicitly stated in Martin would have been obvious to one of ordinary skill in the art. Applicants respectfully traverse the rejection for at least the reasons discussed above and because Martin does not teach or even

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suggest a dynamic system using set theory organization with classification profiles having database schema, nor does Martin teach or suggest information presentation with searching protocols as claimed in the present invention.

To obviate a claim pursuant to 35 U.S.C. § 103, the reference must contain some teaching, suggestion, or incentive to look to particular sources of information, to select particular elements, and to combine them to arrive at the claimed invention. *See Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931 (Fed. Cir. 1990). If it even exists, that teaching, suggestion, or incentive must motivate the skilled artisan to combine the teachings or suggestions with a *reasonable expectation of success*. Further, it is very important that the teaching or suggestion to make the claimed combination and the reasonable expectation of success be apparent from the prior art, and not the Applicants' disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP 2143.03. Therefore, it is improper for the Examiner to use the Applicants' invention as a blueprint to hunt through the prior art for the claimed elements and then combine them as claimed. *See In re Zurko*, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997).

Applicants respectfully submit there is no teaching, suggestion or motivation in Martin to arrive at claims 6-21. Martin teaches an improved way of selecting and browsing information using a point and click joystick wherein the information is organized in a tree structure, much like a card catalogue. Nothing in Martin's output system suggests a dynamic multimedia system of interactive management organized by set theory of classification profiles in a data schema designed to a user selected application set forth in claims 6-21.

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In fact, Martin's tree structure organization is unlikely to be productive of the result sought by the Applicants. Applicants initially proposed using a tree structure to organize data in their system, but such way of organizing prevented their objective of providing a dynamic interactive system capable of relating common characteristics among data of different categories or subcategories. In search for alternatives they discovered a unique way or implementing library science and linguistic means to analyze words for content. The tree structure does not offer capability but would suggest against it. Known disadvantages which would naturally discourage the search for new inventions should be taken into account in determining obviousness. *See United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966). It is error to find obviousness where references "diverge from and teach away from the invention at hand." *W. L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983). The limitations of the tree structure necessarily prevent Martin's system from retrieving elements of common characteristics from different categories or subcategories, altering an element and storing it in different locations, or referring to it by more than one designation as set forth in claims 6-8 as amended.

Martin's system functions on standard television. Although Martin mentions an arrangement for internet browsing, it contemplates a heavy client designed for downloading data. By contrast, the system as set forth in claim 9 maintains the information centrally to allow for a light client. Internet web pages provide user access through a web server to the database. This is not shown or suggested in Martin.

Further, Martin does not disclose the search mechanisms of claims 10 and 18, as amended. Amended claim 10 provides one or a combination of user executable features for

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accessing and retrieving data elements. In particular the claimed features include as follows: (a) providing access to the most common or most recent information used within a category or subcategory; (b) retrieval and processing of said data for presentation in each form in which said data is used; (c) storing the information most commonly used by said user according to a categorization established by said user; (d) selection of an audible, visual and/or textual broadcast of a designated element of said data according to a selected multimedia format; (e) combining an element with other elements for presentation in at least one broadcast; and/or (f) searching each category or subcategory for at least one said element. Not one of these features is shown or suggested in Martin.

Amended claim 18 provides searches conducted by a match of one or more of the following: (a) data contained within said item; (b) identification information for said item; (c) classification information for said item; (d) natural language terms; (e) Boolean operators; and/or (f) keywords.

As to claim 21, nothing in Martin teaches or suggests a search feature that accommodates inaccuracies created by a search request or digitization of data.

Lacking any of the above such suggestions, Martin cannot form a proper basis on which to obviate any of claims 6-21 of the present invention.

V. Double Patenting

The Examiner has provisionally rejected claims 1-21 pursuant to 35 U.S.C. § 101 as claiming the same invention as that of claims 1-21 of copending Application No. 10/210,460. Applicants will cancel or amend any conflicting claims so they are no longer coextensive in scope to overcome the rejection.

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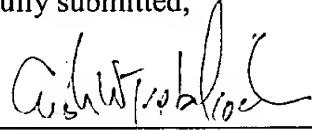
VI. Conclusion

Applicants respectfully submit that the patent application and the claims, as amended, therein are in a condition for allowance. Accordingly, reconsideration of all rejections is respectfully requested. Allowance of all claims at an early date is solicited.

Applicants would appreciate the courtesy of a telephone call to the undersigned attorney of record should the Examiner have any questions or comments with respect to this response or the claim language for purposes of efficiently resolving same.

Respectfully submitted,

By



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